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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,712	03/04/2004	Kazuhiro Hattori	118883	5114
25944	7590	12/06/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			BASHORE, ALAIN L	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/791,712

Applicant(s)

HATTORI ET AL.

Examiner

Alain L. Bashore

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 13-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I (claims 1-12) in the reply filed on 10-18-05 is acknowledged. The traversal is on the ground(s) that Group II is not capable of forming a magnetic recording medium without a plurality of grooves to provide recording elements; and that newly added claim 18 is "generic". This is not found persuasive because claims of Group II do not preclude the finished apparatus as claimed to including resultant partitioning the same as that produced utilizing "minute grooves". Newly added Claim 18 is not generic because the means plus function recitations do not preclude other methods (not using "minute grooves", such a layering type method) to result with a partitioning structure of the final structure.

Newly added claim 18 is hereby added to group II.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 13-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10-18-05. A complete reply to a final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-2,8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "minute" which is vague and indefinite since to meets and bounds is give for such a term.

The term "intermediate" is vague and indefinite as recited in claims 1-2, and 8. The term is unclear because there is ambiguity as to a recitation of a function (i.e.: an intermediate step) or physical aspect (i.e.: an intermediate layer or surrounding).

The term "a production process for a magnetic recording medium" is vague and indefinite since no meets and bounds are recited.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2, 4, 7, 9-12 rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent publication 09-097419 (Ichihara et al) in view of Fukuzawa et al .

Ichihara et al discloses a method of producing a magnetic recording medium . A recording layer processing step, which by forming a plurality of grooves, with spacing there between in a planar direction, in an intermediate from a production process for a magnetic recording medium produced by forming a continuous recording layer on top of a substrate surface, partitions said continuous recording layer into a plurality of partitioned recording elements. A non-magnetic body filling step for filling said grooves between said partitioned recording elements with a non-magnetic body. (see abstract, drawing figure). A protective layer formation step for forming a protective layer that protects said partitioned recording elements and said non-magnetic body (para 0043).

Ichihara et al does not explicitly disclose the recording layer processing step conducted with an environment surrounding said intermediate maintained in a state of vacuum.

Fukuzawa et al discloses steps conducted with an environment surrounding said intermediate maintained in a state of vacuum (para 0330).

It would have been obvious to one with ordinary skill in the art to include the recording layer processing step conducted with an environment surrounding said intermediate maintained in a state of vacuum because Fukuzawa et al teaches need for high-capcity media (para 0002).

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent publication 09-097419 (Ichihara et al) in view of Fukuzawa et al as applied to claims above, and further in view of Kahn et al.

Ichihara et al in view of Fukuzawa et al do not explicitly disclose a dry process cleaning step as claimed.

Khan et al discloses a dry process cleaning step as claimed (para 0081).

It would have been obvious to one with ordinary skill in the art to include a dry process cleaning step as claimed because Kahn et al teaches unwanted deposits (para 0011).

8. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent publication 09-097419 (Ichihara et al) in view of Fukuzawa et al as applied to claims above, and further in view of Kruger et al.

Ichihara et al in view of Fukuzawa et al do not explicitly disclose the claimed incidence angle range

Kruger et al discloses the claimed incidence angle range (para 0027).

It would have been obvious to one with ordinary skill in the art to include the claimed incidence angle range because Kruger et al teaches preference for deposit angle (para 0027).

9. Claims 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent publication 09-097419 (Ichihara et al) in view of Fukuzawa et al as applied to claims above, and further in view of Japanese patent publication 11-130329 (Mashita et al)

Ichihara et al in view of Fukuzawa et al do not explicitly disclose bias power to the intermediate.

Mashita et al discloses interaction of bias to deposition (para 0019).

It would have been obvious to one with ordinary skill in the art to include bias power to the intermediate because Mashita et al teaches change in coating conditions (para 0028).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alain L. Bashore whose telephone number is 571-272-6739. The examiner can normally be reached on about 7:30 am to 5:00 pm (Mon. thru Thurs.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alain L. Bashore
Primary Examiner
Art Unit 1762